

I claim:

1. A static dissipative paperboard comprising:

at least one static dissipative substance homogeneously dispersed throughout the static dissipative paperboard, wherein the static dissipative paperboard is substantially free of carbon particles.

2. The static dissipative paperboard of claim 1, wherein the static dissipative paperboard has an electrical resistance between about 1×10^4 and about 1×10^{11} ohms at a relative humidity of less than or equal to 12 percent.

3. The static dissipative paperboard of claim 1, wherein the static dissipative substance is selected from the group consisting of poly(diallyldimethylammonium chloride), polyethylene glycol, diethanol amide and mixtures thereof.

4. The static dissipative paperboard of claim 1, wherein the static dissipative substance is poly(diallyldimethylammonium chloride) in an amount between about 0.5 and about 7.5 percent by weight.

5. The static dissipative paperboard of claim 1, wherein the static dissipative substance is diethanol amide in an amount between about 1.0 and about 7.0 percent by weight.

6. The static dissipative paperboard of claim 1, wherein the static dissipative substance is polyethylene glycol in an amount between about 1.5 and about 6.0 percent by weight.

7. The dissipative paperboard of claim 1, further comprising an effective color producing amount of a dissipative pigment or dye.

8. The static dissipative paperboard of claim 1, wherein said static dissipative paperboard comprises less than about 8 ppm of reducible sulfur.

9. A fiberboard composition comprising:

at least one conductive paperboard sandwiched between layers of static dissipative linerboard;

an electrically conductive substance substantially homogeneously dispersed throughout said paperboard; and,

a static dissipative substance substantially homogeneously dispersed throughout the static dissipative linerboard.

10. The fiberboard of claim 9, wherein said conductive paperboard has an electrical resistance equal to or less than about 1×10^3 ohms.

11. The fiberboard of claim 9, wherein said static dissipative linerboard has an electrical resistance between about 1×10^4 and 1×10^{11} ohms at a relative humidity of less than twelve percent.

12. The fiberboard of claim 9, wherein said conductive paperboard sandwiched between said layers of static dissipative linerboard has a wave shape.

13. The dissipative paperboard of claim 9, wherein the static dissipative substance is selected from the group consisting of poly(diallyldimethylammonium chloride), polyethylene glycol, diethanol amide and mixtures thereof.

14. The dissipative paperboard of claim 9, wherein the static dissipative substance is poly(diallyldimethylammonium chloride) in an amount between about 0.5 and about 7.5 percent by weight of said linerboard.

15. The dissipative paperboard of claim 9, wherein the static dissipative substance is diethanol amide in an amount between about 1.0 and about 7.0 percent by weight of said linerboard.

16. The dissipative paperboard of claim 9, wherein the static dissipative substance is polyethylene glycol in an amount between about 1.5 and about 6.0 percent by weight of said linerboard.
17. The fiberboard of claim 9, wherein said electrically conductive substance is about 6% to about 10% by weight of said conductive paperboard.
18. The fiberboard of claim 9, wherein said electrically conductive substance is carbon particles.
19. The fiberboard of claim 9, wherein said electrically conductive substance is carbon black.
20. The static dissipative linerboard of claim 9, wherein said static dissipative linerboard comprises less than about 8 ppm of reducible sulfur.
21. The static dissipative linerboard of claim 9, wherein said conductive paperboard has a basis weight range between about 10 lbs/msf and about 50 lbs/msf.

22. Static dissipative paperboard comprising a static dissipative substance homogeneously dispersed throughout said paperboard, said static dissipative paperboard has an electrical resistance between about 1×10^4 and about 1×10^{11} ohms at a relative humidity of less than or equal to 12 percent.
23. The static dissipative paperboard of claim 22, wherein the static dissipative substance is selected from the group consisting of poly(diallyldimethylammonium chloride), polyethylene glycol, diethanol amide and mixtures thereof.
24. The static dissipative paperboard of claim 22, wherein the static dissipative substance is poly(diallyldimethylammonium chloride) in an amount between about 0.5 and about 7.5 percent by weight.
25. The static dissipative paperboard of claim 22, wherein the static dissipative substance is diethanol amide in an amount between about 1.0 and about 7.0 percent by weight.
26. The static dissipative paperboard of claim 22, wherein the static dissipative substance is polyethylene glycol in an amount between about 1.5 and about 6.0 percent by weight.
27. The static dissipative paperboard of claim 22, further comprising an effective color producing amount of a dissipative pigment or dye.
28. The static dissipative paperboard of claim 22, wherein said static dissipative paperboard is adhered to a conductive paperboard on an exposed face thereof.
29. The static dissipative paperboard of claim 22, wherein said static dissipative paperboard is linerboard.
30. The static dissipative paperboard of claim 22, wherein said static dissipative paperboard comprises less than about 8 ppm of reducible sulfur.

31. A conductive paperboard comprising a conducting material homogeneously dispersed throughout the paperboard, said paperboard having an electrical resistance of less than or equal to about 1×10^3 .
32. The conductive paperboard of claim 31, wherein said conducting material is carbon particles.
33. The conductive paperboard of claim 31, wherein said conducting material is carbon black.
34. The conductive paperboard of claim 33, wherein said carbon black comprises from about 6% to about 10% by weight of said conductive paperboard.
35. The conductive paperboard of claim 31, wherein said conductive paperboard has a basis weight range between about 10 lbs/msf and about 50 lbs/msf.

36. A method for making recyclable fiberboard for use in protecting electrostatically sensitive devices from the hazards of electrostatic discharge comprising the steps of:

(a) providing a conductive paperboard layer having an electrical resistance of less than or equal to about 1×10^3 ohms;

(b) providing static dissipative linerboard having electrical resistance of between about 1×10^4 to about 1×10^{11} ohms at twelve percent relative humidity; and,

(c) adhering said static dissipative linerboard to at least one side of said conductive paperboard through a heat and starching process.

37. The method of claim 36, wherein said conductive paperboard layer has a wave shape.

38. The method of claim 36, wherein said conductive paperboard layer is in continuous roll form.

39. The method of claim 37, wherein said static dissipative linerboard is adhered to the apexes and nadirs on both sides of the wave shaped conductive paperboard.

40. The method of claim 36, wherein said static dissipative linerboard is adhered to both sides of said conductive paperboard.

41. The method of claim 36, wherein said conductive paperboard layer comprises carbon black in an amount ranging from about 6% to about 10% by weight.

42. The method of claim 36, wherein said conductive paperboard has a basis weight range between about 10 lbs/msf and about 50 lbs/msf.

43. The method of claim 36, wherein said conductive paperboard is prepared by batch mixing paper pulp and carbon black in water.

44. The static dissipative linerboard of claim 36, wherein the static dissipative linerboard comprises a static dissipative substance selected from the group consisting of

poly(diallyldimethylammonium chloride), polyethylene glycol, diethanol amide and mixtures thereof.

45. The static dissipative linerboard of claim 36, wherein the static dissipative linerboard comprises from about 0.5 to about 7.5 percent by weight.

46. The static dissipative linerboard of claim 36, wherein the static dissipative linerboard comprises from about 1.0 to about 7.0 percent by weight.

47. The static dissipative linerboard of claim 36, wherein the static dissipative linerboard comprises from about 1.5 to about 6.0 percent by weight.

48. The static dissipative linerboard of claim 36, further comprising an effective color producing amount of a dissipative pigment or dye.

49. A fiberboard composition comprising:

at least one conductive paperboard, said conductive paperboard has an electrical resistance equal to or less than about 1×10^3 ohms and a basis weight range between about 10 lbs/msf and about 50 lbs/msf;

an electrically conductive substance substantially homogeneously dispersed throughout said paperboard;

at least one static dissipative linerboard, said static dissipative linerboard has an electrical resistance between about 1×10^4 and 1×10^{11} ohms at a relative humidity of less than twelve percent and less than about 8 ppm of reducible sulfur; and,

a static dissipative substance substantially homogeneously dispersed throughout the static dissipative linerboard.

50. The dissipative paperboard of claim 49, wherein the static dissipative substance is selected from the group consisting of poly(diallyldimethylammonium chloride), polyethylene glycol, diethanol amide and mixtures thereof.

51. The fiberboard of claim 49, wherein said conductive paperboard layer comprises carbon black in an amount ranging from about 6% to about 10% by weight.

52. A conductive paperboard comprising from about 6% to about 10% by weight carbon black dispersed throughout the paperboard, said paperboard having an electrical resistance of less than or equal to about 1×10^3 and a basis weight range between about 10 lbs/msf and about 50 lbs/msf.

53. A method for making recyclable fiberboard for use in protecting electrostatically sensitive devices from the hazards of electrostatic discharge comprising the steps of:

(a) providing a wave shaped conductive paperboard layer having an electrical resistance of less than or equal to about 1×10^3 ohms, said conductive paperboard layer comprises carbon black in an amount ranging from about 6% to about 10% by weight and has a basis weight range between about 10 lbs/msf and about 50 lbs/msf;

(b) providing linerboard having dissipative electrical resistance of between about 1×10^4 to about 1×10^{11} ohms at twelve percent relative humidity; and,

(c) adhering linerboard to at least one side of said conductive paperboard through a heat and starching process.

54. The method of claim 53, wherein said linerboard is adhered to the apexes and nadirs on both sides of the wave shaped conductive paperboard.

55. The method of claim 53, wherein said conductive paperboard is prepared by batch mixing paper pulp and carbon black in water.

56. The static dissipative linerboard of claim 53, wherein the static dissipative linerboard comprises a static dissipative substance selected from the group consisting of poly(diallyldimethylammonium chloride), polyethylene glycol, diethanol amide and mixtures thereof.